DOCUMENT RESUME

ED 188 784 PS 011 580

AUTHOR Baron, Lois J.
TITLE What Do Children Really See on Television?
SPONS AGENCY Concordia Univ., Montreal (Quebec).
PUB DATE Apr 80
NOTE 25p.: Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 7-11, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Age Differences: *Children: *Childrens Television: Cognitive Processes: *Comprehension: Fantasy: Interviews: Production Techniques: *Television Viewing

ABSTRACT

Children from 3 to 14 years of age were asked questions pertaining to their understanding of such television-related characteristics as technique (zooms and edits), fantasy and reality, production source, and acting. Using semi-clinical interviews, the study assessed the kinds of thought processes characteristic of children at varying age levels as these processes related to thinking about television content and form. One hundred-fifty children from kindergarten and grade school, and 20 children from preschool were individually interviewed using a 28-item questionnaire. Levels of understanding were coded from 1 to 6, indicating degrees of understanding from "no understanding" to "full understanding." Shifts toward more sophisticated understanding of the television-related concepts generally appear at the onset of concrete thinking in the child (ages 7, 8). Except for understanding of production source concepts (reception of T.V. signals and program scheduling) which appear later in development, the data confirm this trend. Tables are presented for the percentage of subjects at each age with at least partial understanding of television techniques, production source, acting, and reality and fantasy. (Author/SS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED188784

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

What Do Children Really See on Television?

Lois J. Baron, Ph.D.
Department of Education
Concordia University
Montreal, Canada

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lois J. Baron

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

American Educational Research Association
Boston, Massachusetts
1980

PS011580

What Do Children Really See On Television?

Concern about the effects of children's televiewing behavior has stimulated a range of research projects over the last twenty-five years. Research efforts have included both laboratory and field research techniques designed to investigate the nature of the interaction between the child and the medium. Only recently, however, have investigators taken into account Schramm, Lyle, & Parker's (1961) statement,"what the child brings to the television is as important as what television brings to the child"(p. 8).

Fairly recently, there has been a trend toward not only examining how children themselves perceive the form and content of the medium, but also toward more developmentally-oriented studies designed to assess at what particular stage certain types of medium understanding evolves. Stimulated by previous research carried out in the general area of developmental psychology (e.g. the work of Hans Furth and David Elkind), and in answer to the often-expressed concern over the effects of television on children, this particular study was conceived with the above goal of developmentally-oriented research in mind. Specifically, the study reported here explored the issue by directly asking children from three to fourteen years of age questions pertaining to their understanding of such television-related characteristics as technique (e.g. zooms and edits), fantasy/reality, production source, and acting.

The studies of Hans Furth (1976) and David Elkind (1978) have both demonstrated the necessity of using a semi-clinical, "Piagetian" model to assess environmental influence within a child's world. The study reported here was explorative and descriptive in nature as were those of Furth and Elkind. Using semi-clinical interviews, the study assessed the kinds of thought processes characteristic of children at varying age levels as these processes relate to thinking about television content and form.

Using Piagetian philosophy as a framework, both Furth's and Elkind's work demonstrated that as a result of both development and experience, the young child moves from global, undifferentiated levels of thinking about societal institutions such as banks, schools, and religion toward more highly differentiated modes of thinking. Furth found that the stage in which major logical inconsistencies in thinking about social institutions were eliminated generally aligned with the concrete operational stage of development. Elkind found similar developmental trends in children's thinking about religion and prayer. His results demonstrated that 5 year olds are global undifferentiated in their thinking, 6 and 7 year olds are in a transitional stage between global and concrete differentiated levels of conceptualization, 8 year olds fell into a concrete differentiated stage, while 9-11 year olds were in transition between concrete and abstract, and 12 year old responses demonstrated "pure" abstract thinking.

In the area of children and television, a number of studies have been carried out that demonstrated developmental shifts in

children's thinking about the medium. Aimée Dorr (1976) investigated children's critical evaluation of television. Her work focused on those aspects of T.V. content (e.g. plot lines, actors, characterizations) that influence a child's evaluation of the applicability of that content to their life. Semi-clinical interviews included questions on such topics as general opinions about television, techniques for evaluating reality and applicability of television content, knowledge of the television industry, and awareness of stereotyped portrayals of sex roles, race roles, and styles of interpersonal interaction. Assessing levels of understanding, generally Dorr found significant differences by age in the percentage use of abstract statements.

Wachman & Wartella (1977) and Wartella (1977 & 1979) reviewed a number of studies in the cognitive developmental domain as they relate to children and television. The results of these studies and the work of Salomon (1979) in Israel has further demonstrated shifts in thinking about the "T.V. world". Age-related differences existed in such content areas as children's thinking about advertising, portrayals of aggression, television settings and portrayals. As stated by the researchers, more process-oriented studies of the nature described above are needed as they pertain to understanding of content and population differences in T.V. understanding. There is also a particular lack of research surrounding young children's understanding of television-related characteristics.

As mentioned, this study was designed to investigate the

question of children's shifts in thinking about particular television-related elements. Utilizing a semi-clinical approach, children were questioned as to their knowledge of these T.V. characteristics.

For the purpose of this paper, only those responses which were coded in terms of levels of understanding will be reported. Similar to children's thinking about other social phenomena, a child's understanding of television ought to be characterized as an increasing process of awareness. However to say that children see television as real or not was not sufficient. Delving further into the nature of a child's "constructions" of T.V. reality was required. It must be kept in mind that what was questioned here was not so much an examination of T.V.'s "direct" effects on a child, but rather the clarification of stages and developmental shifts in these constructions. Because of limited experience and reliance on immediate perceptions, the young child's conception of the "reality" of television was hypothesized to be very different from that of older children who, it was assumed, conceive beyond the perceptual features of a stimulus and actually apply logical rules to that understanding. It was hypothesized that children's understanding of television would show a progression toward more sophisticated levels of understanding by the concrete operational stage of thinking (approximately age 7).

Method

Subjects

Subjects were 170 children (71 males, 99 females) ranging in age from 3 to 14. A total of 150 children were chosen from kindergarten and grade school, while 20 subjects were from the preschool level. There were 9, 3-4 year olds; 16, 5 year olds; 19, 6 year olds; 20, 7 year olds; 21, 8 year olds; and 6, 13-14 year olds.

Subjects were chosen from a preschool and elmentary school in a suburban middle class community. Only subjects whose parents agreed to have their child participate in the study were used.

Instruments and Procedure

Subjects were interviewed individually in a quiet location at their respective school. The interviews took approximately twenty minutes each as the children responded to a twenty eight item questionnaire designed by the investigator. The items included in the questionnaire were of both the closed and open-ended variety. They were designed to assess children's responses to questions of actors' roles, T.V. techniques, reality/fantasy, and production source. Probing questions were built into most items in order to assess levels of understanding of the children's responses to the television-related questions. The questionnaire itself was validated for comprehensiveness through numerous test trials and pilot testing with young children. The questions had to be understood particularly by the younger

children in order to be a reliable measure of T.V. understanding.

Two research assistants coded all direct responses, probe responses, and levels of understanding. Using Dorr's methodology, the levels of understanding were coded from 1 to 6 as follows:

1 no understanding - absolutely no information is given

2 misconceptions - subject's response indicates misunderstanding of the concept

3 understanding peripheral facts - partially correct knowledge (that is, subject might mention certain bits of information without relating them)

4 understanding isolated facts - subjects had accurate knowledge of certain facts without connecting them together

5 partial understanding - subject knows either one or another of the possible responses to a question

6 full understanding - subject knows the answer and possible different reasons are mentioned if there are such reasons

A reliability check was run to insure inter-rater reliability. No significant differences were found between the research assistants' ratings of children's responses.

Results

In order to assess the possiblity of developmental shifts in thinking about certain television-related characteristics, the data were grouped by age and cross-tabulation tables were prepared. The data were analyzed by a Chi-square (X^2). Both nominal and ordinal data were gathered. For the purpose of this paper, only the ordinal data characterized by levels of understanding are presented. Some qualitative responses are reported in the

discussion of the results.

The results related to levels of understanding consist of data gathered on fifteen of the twenty eight test items included in the questionnaire. The results on each question are grouped according to their belonging in a particular T.V.-related area (e.g. television techniques, production source, etc.). The findings are represented in the four tables found in the Appendix. Each table describes the percentage of subjects at each age level who responded with at least partial understanding (level 5) to a particular question. At this particular point in time and until the data are further collapsed and adjacent age categories combined to satisfy all cell requirements of the X^2 statistic, caution is urged in interpreting the X^2 levels of significance. For this particular reason, although all analyses revealed highly significant relationships between age and levels of understanding, the more descriptive percentage data are presented here.

Shifts toward more sophisticated understanding of the television-related concepts generally appear at the onset of concrete thinking in the child (ages 7, 8). Except for understanding of production source concepts (e.g. reception of T.V. signals and program scheduling) which appear later in development, the data confirm the proposed hypothesis.

Table 1 presents the results related to knowledge of T.V. techniques. The six questions in this category include children's understanding of 1) how cartoons are made (How are cartoons made?),

2) editing (What happens to Diana Prince's clothes when she spins into Wonder Woman?), 3) zoom (If you see a bird up close on the T.V. screen, does that mean a person climbed a tree to take the picture?), 4) set stage (Do you really have to go to outer space to take pictures of all the planets, stars and galaxies you see on programs like Battlestar Gallactica?), 5) stunts (When someone gets shot on T.V., do they really die?), 6) superhero reality (If Wonder Woman visited your house, could she jump over your refrigerator or pick up your stove?).

All the X^2 analyses reveal that children's understanding of technology related to television is age-related. A large shift in understanding occurs between ages 6 and 7 for understanding of how cartoons are made. An increase from 38.1% partial understanding at age 8 to 61.1% at age 9 indicates a substantial shift in comprehending the concept of editing. At least partial knowledge of zoom begins to develop at age 7 with a larger percentage of understanding at age 8. Understanding of set stage is represented by a reoccurring inverted U-shaped curve, while shifts in understanding of stunts on T.V. appears quite early as indicated by the differences in percentage responses made by 4 (12.5%) and 5 (50%) year olds. By age 7, 75% demonstrate at least partial understanding of stunts while comprehension of superhero reality appears at age 8 (61.9%), showing a sharp increase from age 7 (25%).

Table 2 reveals the responses related to at least partial understanding of the electronics of television reception (When

your mother or father buys a T.V. set, are the T.V. shows in the T.V. set when they buy it?), and program scheduling (Who decides when a T.V. show is on?). Although the X^2 reveals an age-related relationship, both are difficult concepts (as seen by the low percentages at even the upper end of the age continuum). The largest gain in production source knowledge occurs at age 12 with 47.1% having at least partial understanding of the electronics of program transmission and 33.4% of program scheduling.

Table 3 reveals the percentages related to children's understanding of concepts surrounding acting. Results related to the understanding of both scripting (Does somebody tell the actors on T.V. what to say on a program?) and character portrayal (Does Richie on Happy Days, or the little girls on Little House on the Prairie have another family to go to when you turn off your T.V. set?). Children's responses to both questions reveal that by age 7 a substantial shift in understanding occurs, with an increasing trend toward larger percentages of understanding with age.

Table 4 includes percentages of at least partial understanding to the reality/fantasy phenomenon. Questions examine children's understanding of 1) character reality (Is Big Bird a real life bird?), 2) cartoon reality (Could the Flintstones move next door to you? If you went for a ride in the car or took an airplane, could you go and visit the Flintstone family in Bedrock? and Is Bugs Bunny a real rabbit?), and 3) puppet reality (If Bert or Ernie on Sesame Street accidently cut their finger would they bleed?)

A marked increase in at least partial understanding of character reality occurs at age 5 (62.5%), with an even larger percentage increase at age 6 (94.7%). Very young children experience difficulty in expressing comprehension of cartoon reality (Could the Flintstones move next door to you?) The major shift in understanding appears between the ages 6-8. The two other questions related to cartoon reality pinpoint age 7 as a turning point in understanding. A large shift related to puppet reality comprehension occurs between ages 6 and 7, with 90% understanding at age 7, an increase of 32.1% from age 6.

Discussion

As previously stated, the results of this study (except in the area labelled production source) confirm the stated hypothesis as it relates to developmental shifts in thinking about T.V.-related characteristics. It was hypothesized that most major shifts in thinking would occur at approximately age 7, a time when young children's thought is not as bound by immediate perceptions, but rather takes on the developing abstract thought of the concrete stage. The data appear to confirm Wartella's (1979) statement that "there is some evidence that at least major change points in the structure of television programs are processed by children as young as third grade"(p. 32).

The findings of this study also confirm those of Elkind and Furth who found that more differentiated thinking about social institutions occurs at approximately ages 7, 8. That knowledge concerning the electronic transmission of television signals and program scheduling occurs later is most likely due to the "learned"

nature of these concepts--concepts which most adults probably have little or no knowledge of. It is interesting to note that these concepts are not television-related in the sense that they have nothing to do with what a child actually perceives on the screen. Comprehending the T.V.-related information appears to be at least partially understood by the middle elementary school years (approximately grade 3).

Eight appears to be the average age when understanding concepts related to television technique appears. Such techniques as zoom and editing are not well understood by younger children. The results confirm those of Dorr (in Wartella, 1979) who also discovered that children's understanding of production technique was limited. When asked, "What happens to Diana Prince's clothes when she spins into Wonder Woman?", the majority of younger children make such comments as, "they change", "they disappear", "she takes the clothes out from hiding". The older the children, the more they express some knowledge of the editing process.

Concerning knowledge of how cartoons are made 3-6 year olds make such statements as, "special machines", "they are people in costumes", or "just by pictures". Older children demonstrate some understanding by responding that cartoons are drawn and made to move as they are "flipped" or "projected".

Knowledge of the production technique of zooms begins to appear at age 7 and is not that well understood by most children until ages 10 and 11. When asked if one has to climb a tree to take a close up shot of a bird, younger children respond with

such answers as "you have to be right beside the bird to make it close", "just take it from below" (without mentioning a zoom lens), or "stand far back". Some children even suggested capturing the bird first. The answer of "standing far back" is a curious one. Some children even suggested hiding behind bushes. It appears that the main intent behind such a response is concern with not disturbing the bird for fear of its flying away. Young children center on the problem of the bird flying away without thinking of possible "techniques" of shooting the bird through mechanical means. It would appear that knowledge of zooms, because of its relationship to technology, is very much learned behavior that children would acquire with both age and experience.

Although one-third of 7 year olds know that "no person could do that", most children between the ages 3-7 have little idea as to why Wonder Woman can perform such "magic" acts on T.V. The majority of younger children do not respond at all while older children refer to "trick photography", "special effects", or "plastic (unreal) props".

To highlight some of the other anecdotal responses gathered through the probe questions, when asked if T.V. programs come with a bought T.V. set, besides not knowing, young children respond with such answers as, "the person who makes the T.V. show puts the pictures in", "you put on the T.V. set and they are there", or "batteries". Older children demonstrate more knowledge of electricity, air waves, or antennae.

Age 7 appears to be a turning point in understanding of

scripting or character portrayal. Similar trends are found in Lyle and Hoffman's (1972) and Hawkin's (1977) research. As children grow older, they see actors as taking roles and leading lives outside of the television life they portray.

A major concern as it relates to the interaction between children and television is the issue of perceived fantasy/reality on the screen and its effect on children. The data gathered here generally support the finding that with age, children do exhibit some understanding of the "T.V. world" as apart from the real world. For example, by age 6 approximately one-half of the children tested know that the Flintstone family could not move next door, nor could they visit the Flintstones in Bedrock. Younger children are not as sure as older children as to why Bugs Bunny is not a real rabbit. However by age 8, at least 95% are aware of the characteristics of being an "unreal" cartoon character. The younger children concentrate on the physical differences between the cartoon character and a real rabbit.

To summarize, it appears that as found in other research along the same developmental vein, children begin to "think about what they see on television by approximately age 7. An advantage of this study is the inclusion of probe questions built into the test items. Such open-ended questions are necessary if one is to assess the nature of the children's responses. Without such data, how responses differ across age levels would not necessarily be known. While children of all age levels may correctly respond to a question, their levels of understanding indicate that their

responses are actually very different in terms of levels of abstraction. The data suggest that while younger children are sometimes capable of focusing on one or possibly two points of information related to a "good" response, the older children are much more differentiated in their thinking.

More developmental studies of this nature are needed if we are to further our understanding of the interaction between children and television. As Wartella has indicated, there is a void of research studies in this area, particularly related to children's understanding of the techniques or form of television. If assessing children's understanding of social institutions is becoming an increasingly important research area, then certainly television can be considered a major item of such research endeavours. Interviewing children directly is one method of examining the effects of T.V. on children. Inquiring as to how they think about television-related factors is going right to the source of message reception.

The results referred to in this paper suggest that with development, including both maturation and environmental interaction that coincides with growth, children do acquire knowledge of the television world. There is however one area that stands out as not being that well understood by many of the children tested. Knowledge of production technique and T.V. form appears lacking in the children's repertoire. Such knowledge ought to be taught to children in the same manner as figures of speech or plot comprehension in books, drama, or poetry are

dealt with in school. There is a recent move toward the development of critical viewing skills curriculum for classroom use. The results of this study, as they relate to children's understanding of the semiotics or language of television, demonstrate that such a move is justified. Children ought to be educated in the symbol system of the medium. Schools and perhaps even the medium itself ought to take the responsibility for promoting such learning.

FOOTNOTES

I wish to acknowledge assistance from the Government of Quebec, Canada and from Concordia University. Janice Pollock and Devora Neumark provided important assistance in data collection while Nancy Tolchinsky played an important role in analysis.

References

Dorr-Leifer, A., Graves, S., Forte, M., Phelps, E. Children's Critical Evaluation of Television Content. Symposium presented at the American Psychological Association, Washington, 1976.

Elkind, D. The Child's Reality. Toronto: John Wiley & Sons, 1978.

Furth, H., Baur, M. & Smith, J. Children's Conception of Social Institutions: A Piagetian Framework. Human Development, 1976, 19, 351-374.

Hawkins, R. The Dimensional Structure of Children's Perceptions of Television Reality. Communication Research, 1977, 3, 299-320.

Lyle, J. & Hoffman, H. Children's Use of Television and Other Media. In Comstock, G., Rubenstein, A. & Murray, J. (Eds.). Television and Social Behavior. Vol. 5, Washington, D.C.: U.S. Government Printing, 1972.

Salomon, G. Shape, Not Only Content: How Media Symbols Partake in the Development of Abilities. In E. Wartella (ed.). Children Communicating: Media and Development of Thought, Speech, and Understanding. Beverley Hills: Sage Publications, 1979.

Schramm, W., Lyle, J. & Parker, E. Television in the Lives of Our Children. Stanford: Stanford University Press, 1961.

Wachman, D. & Wartella, E. A Review of Cognitive Devleopment Theory and Research and the Implication for Research on Children's Responses to Television. Communication Research, 1979, 4, 203-223.

Wartella, E. Children and Television: The Development of the Child's Understanding of the Medium. Report to the Federal Communications Commission, August, 1979.

Wartella, E. (Editor) Children Communicating: Media and Development of Thought, Speech, Understanding - SAGE Annual Reviews of Communication Research, Beverley Hills: Sage Publication, 1979.

TABLE 1

Percentage of Subjects with at Least Partial Understanding of Television Techniques

	CONTENT AREAS					
AGE	CARTOON PRODUCTION	EDITING	ZOOM	SET STAGE	STUNTS	SUPERHERO REALITY
3	-	-	-	-	-	-
4	-	-	-	-	12.5	-
5	6.3	-	-	-	50.0	6.3
6	10.5	-	5.3	36.8	63.2	15.8
7	40.0	30.0	25.0	50.0	75.0	25.0
8	57.1	38.1	42.9	66.7	81.0	61.9
9	86.4	61.1	63.6	47.6	85.7	66.7
10	44.4	52.9	72.2	61.2	88.9	64.7
11	77.2	66.7	81.8	63.7	81.8	85.0
12	58.8	76.5	82.4	76.5	94.1	64.7
13	40.0	80.0	80.0	40.0	80.0	60.0
14	-	-	-	-	-	-

TABLE 2

Percentage of Subjects with at Least Partial Understanding of Production Source

	CONTENT AREAS	
AGE	PROGRAM RECEPTION	PROGRAM SCHEDULING
3	-	-
4	-	-
5	-	-
6	10.6	10.5
7	5.0	10.0
8	9.5	14.3
9	27.2	18.1
10	22.3	23.6
11	27.2	33.4
12	47.1	41.2
13	40.0	40.0
14	100.0	-

TABLE 3

Percentage of Subjects with at Least Partial Understanding of Acting

	CONTENT AREAS	
AGE	SCRIPTING	CHARACTER PORTRAYAL
3	-	-
4	-	-
5	6.3	28.6
6	15.8	27.8
7	65.0	70.0
8	57.1	85.7
9	77.2	100.0
10	72.3	100.0
11	81.8	100.0
12	88.2	100.0
13	80.0	100.0
14	100.0	-

TABLE 4

Percentage of Subjects with at Least Partial Understanding of T.V.'s Reality and Fantasy

	CONTENT AREAS		
AGE	CHARACTER (BIG BIRD) REALITY	CARTOON REALITY	PUPPET REALITY
3	-	100.0	-
4	-	37.5	25.0
5	62.5	37.5	33.3
6	94.7	57.9	57.9
7	80.0	60.0	90.0
8	81.0	76.2	76.2
9	90.9	81.8	90.9
10	100.0	66.7	94.5
11	100.0	77.3	95.4
12	94.1	82.4	100.0
13	80.0	40.0	100.0
14	100.0	-	100.0

	CONTENT AREAS	
AGE	CARTOON REALITY	CARTOON REALITY
3	100.0	-
4	37.5	12.5
5	50.0	43.8
6	42.1	47.4
7	75.0	65.0
8	95.2	95.2
9	95.5	86.4
10	94.4	88.9
11	100.0	90.9
12	100.0	100.0
13	100.0	100.0
14	100.0	100.0